



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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December 7, 2005

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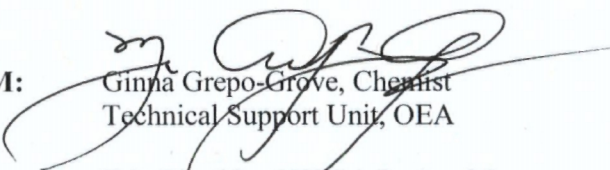
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MEMORANDUM

SUBJECT: QA review of the Portland Harbor RI/FS Round 2 Quality Assurance Project Plan Addendum6: Sampling of Benthic Invertebrate Tissue, Revision: November 23, 2005

FROM:  Gina Grepo-Grove, Chemist
Technical Support Unit, OEA

TO: Eric Blischke, USEPA Project Manager
Chip Humphrey, USEPA Project Manager
Office of Environmental Cleanup

CC: Joe Goulet, USEPA Ecological Risk Assessor, REU, OEA
Dana Davoli, USEPA Human Health Risk Assessor, REU, OEA

The review of the above-referenced document has been completed. In general, the QAPP followed the guidelines and requirements of the QA documents "EPA Guidance for Quality Assurance Project Plans (USEPA 1998, 2002a) and the EPA Requirements for Quality Assurance Project Plans (USEPA 2001)".

A conditional approval of the Portland Harbor RI/FS Round 2 Quality Assurance Project Plan Addendum6: Sampling of Benthic Invertebrate Tissue, Revision: November 23, 2005 is hereby recommended. A final approval of the QAPP shall be issued after the following issues are addressed in the final revision of the QAPP:

- section B4.1 page 10, entry number 3 – due to the limitation on the amount of tissue sample collected, it is highly recommended that all tissue samples be analyzed for organochlorine pesticides using the Axys method (Isotope-dilution SIM GC/MS techniques). The use of Method 8081 (GC/ECD techniques) option through CAS should be removed in the QAPP.
- section B4.1, page 10, 2nd paragraph – a matrix spike, matrix spike duplicate and replicate analysis at a minimum frequency of 1 set for each clam and mussel matrix must be collected for analysis. Only a field replicate analysis is recommended for the isotope dilution GC/MS techniques (PCB congeners, dioxins/furans and pesticides), matrix spike and matrix spike duplicate analyses are not necessary. Therefore, for clarity, double volumes of 52 grams must be collected for one clam and one mussel location (for replicate analyses), and 2 more 40 grams samples (for MS/MSD analyses). Depending on the availability of samples, adjustment of the sample amount for extraction and the final extract volumes shall be an option for the analysis of the QC

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samples.

- section B4.2.2, page 14 – the QAPP stated that the sediment samples will be analyzed for organochlorine pesticides and PCBs by CAS using Methods 8081 and 8082 (GC/ECD techniques). The data generated for these analyses are recommended to be fully validated by EPA QA. The validation shall identify and list samples with potential pesticide detections but may have PCB and other organic material interferences. The list will be used by EPA to decide the archived sediment samples that may need further pesticide re-analysis using the Axys isotope dilution techniques. These options are recommended to be included in the QAPP.

Should you have any question regarding this review, please give me a call at (206) 553-1632 or send me an e-mail at grepo-grove.gina@epa.gov.